Nevertheless, there are cases in which the disturbance of function chiefly affects only the salt or the urea. Thus the classification of renal diseases on the basis of excretion of salt and urea (Widal, Müller) seems justifiable.

Factors Concerning the Coagulation of Blood.—CANNON, MENDENHALL and GRAY (*Amer. Jour. Physiol.*, 1914, xxxiv, 225) have devised a graphic method for the study of blood coagulation. The instrument consists of a light aluminum lever with a long arm, on the end of which is a writing pen which moves over a smoked drum. On the shorter arm there is placed a piece of fine copper wire 8 cm. in length. This wire extends into a cannula. In all the experiments a constant temperature of 25° C. was maintained, and cannulæ of the same size were always used. This insured the taking of the same amounts of blood. They were able to show that the intravenous injections of small doses of adrenalin, or subcutaneous doses of larger size, given to cats, shortened the coagulation time from one-third to one-half the normal. Larger doses (0.3 mg. per kilo) given intravenously, first slowed and then hastened blood coagulation. The effect upon coagulation is not dependent upon synchronous changes in the arterial blood-pressure. After the removal of the liver or intestines, adrenalin in small doses causes no hastening of coagulation, even when added to the withdrawn blood. These experiments were made in an attempt to explain the hypothesis that the liver or intestines, or both, are aroused by adrenalin to greater activity, as a result of which one or more of the factors concerned in coagulation are released. Stimulation of the splanchnics in anesthetized cats accelerates the coagulation time very promptly. The effect wears off in from ten to thirty minutes, and is less marked when the experiment is repeated. If the adrenal gland on the side of stimulation is first removed, no acceleration of coagulation was observed. Hence the assumption that the hastening is due to the release of some component of the adrenal gland. In a similar way, the irritation of large nerve trunks, or a large operation performed under light anesthesia, gives a marked increase in the rapidity of coagulation. States of emotion cause the same in less than one-half minute. Cannon, Mendenhall and Gray, assume that in states of pain or emotion the increased rapidity of the coagulation time is the result of an increased output of adrenalin.

Blood Findings in Some Psychoses.—ITTEN (*Zeit. f. d. ges. Neurol. u. Psychiatr.*, 1914, xxiv, 341) has made careful blood studies in 140 cases of schizophrenia, 20 epileptics, 10 idiots, and 5 cases of chorea. The studies included morphological examinations; estimation of the coagulation time according to Burker's method; the resistance of the red-blood cells, and the determination of the specific gravity according to Hammerschlag's technique. The results of his findings are as follows: In schizophrenia the red-blood cells are found much increased, especially in states of catatonia and stupor, probably due to vasomotor disturbances. The white cells show slight increases, particularly in acute cases and chronic hebephrenics. Neutrophile leukocytes are the ones increased, but with the subsidence of acute symptoms there is a tendency for the development of a lymphocytosis. This continues in cases with an unfavorable prognosis; while in cases showing improvement it tends to diminish in favor of a neutrophilic, and, frequently, eosinophilic increase. During states of excitement the blood picture is as in the acute cases. In most cases the coagulation time is slightly hastened. Itten thinks that the lymphocytosis, and frequent eosinophilia, are perhaps due to some perversion of the internal secretions, especially since it is not infrequent to see symptoms suggestive of a status thymico-lymphaticus. In cases of epilepsy the white blood count is low in the intervals, and tends to increase shortly before and after the attacks. Before, and during the attack, there is a lymphocytosis followed by a leukocytosis of the neutrophile type, a point of considerable diagnostic value since hysterical and paralytic seizures are not associated with a primary lymphocytosis. The coagulation time was always shortened, particularly before and immediately after the attacks.

The Cerebrospinal Pressure.—The present study was undertaken by Dixon and Halliburton (*Jour. Physiol.*, 1914, xlviii, 128), with the object of examining the pressure of the cerebrospinal fluid under various experimental conditions. Tests were made of the validity of the Monro-Kellie doctrine which assumes that since the brain, its vessels and lymphatics are enclosed in a bony case, and that the brain occupies the whole skull and is incompressible, that therefore the total blood content is almost constant. On this assumption the brain can increase its blood content only by turning out the cerebrospinal fluid, and when this fluid has gone the brain comes in contact with the skull so that no further expansion of the vessels can occur. Using suitable manometers Dixon and Halliburton noted the affect of the various changes in the arterial and venous blood-pressure upon that of the spinal fluid. After hemorrhage a fall in the spinal pressure was noted, which they regard as a passive result of the altered vesicular conditions. Following the compression of the bloodvessels, particularly of the aorta, a rise in pressure was noted, which was also thought to be due to altered vesicular conditions which prevent the free absorption or facilitate the secretion of fluid. This fact may be brought into connection with the rise in spinal pressure which is observed clinically under conditions of sudden rise in blood-pressure such as may occur during an acute nephritis. After stimulation of the vagus and sympathetic nerves, various results were noted depending probably upon the affect of stimulation upon blood pressure itself. By experiment Dixon and Halliburton could show that alterations in the cerebrospinal pressure exert a marked passive action on the cerebrovenous pressure. Dixon and Halliburton studied the affect on the cerebrospinal pressure of substances which increase the cerebrospinal fluid secretion, namely: choroid extract which produces an increase in pressure due to a specific increased secretion of fluid; anesthetics and hypnotics; and finally carbon dioxid. Other drugs were used by reason of their ability to produce vesicular changes which would manifest themselves upon the cerebrospinal pressure, namely, adrenalin, a vasoconstrictor; amyl nitrite, a vasodilator; and pilocarpin. Adrenalin appears to affect the cerebrospinal fluid only indirectly through the vesicular system. The increased cerebrospinal pressure tends to fall more rapidly than